

What is claimed is:

1. An isolated nucleic acid molecule encoding FGF-CX, said molecule comprising a nucleotide sequence encoding a polypeptide having a sequence that is at least 85% identical to SEQ ID NO:2, or the complement of said nucleic acid molecule.
2. The nucleic acid molecule of claim 1, wherein said nucleotide sequence encodes a polypeptide of SEQ ID NO:2, or the complement of said nucleic acid molecule.
3. The nucleic acid molecule of claim 1, said molecule encoding the human FGF-CX of SEQ ID NO:1, or the complement of said nucleic acid molecule.
4. The isolated nucleic acid molecule of claim 1, said molecule hybridizing under stringent conditions to a nucleic acid sequence complementary to a nucleic acid molecule comprising the sequence of nucleotides of SEQ ID NO:1, or the complement of said nucleic acid molecule.
5. The isolated nucleic acid molecule of claim 1, said molecule encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:2, or an amino acid sequence comprising one or more conservative substitutions in the amino acid sequence of SEQ ID NO:2.
6. An oligonucleotide of the nucleic acid molecule of claim 1, said nucleic acid molecule less than 100 nucleotides in length and comprising at least 6 contiguous nucleotides of SEQ ID NO:1, or a complement thereof.
7. A nucleic acid vector comprising the nucleic acid molecule of claim 1.
8. The nucleic acid vector of claim 7, wherein said vector is an expression vector.
9. The vector of claim 7, further comprising a regulatory element operably linked to said nucleic acid molecule.

10. A host cell comprising the isolated nucleic acid molecule of claim 1.
11. An isolated polypeptide at least 80% identical to a polypeptide selected from the group consisting of:
- a) a polypeptide comprising an amino acid sequence of SEQ ID NO:2;
 - b) a fragment of a polypeptide comprising an amino acid sequence of SEQ ID NO:2, wherein the fragment comprises at least 6 contiguous amino acids of SEQ ID NO:2;
 - c) a derivative of a polypeptide comprising an amino acid sequence of SEQ ID NO:2;
 - d) an analog of a polypeptide comprising an amino acid sequence of SEQ ID NO:2;
 - e) a homolog of a polypeptide comprising an amino acid sequence of SEQ ID NO:2; and
 - f) a naturally occurring allelic variant of a polypeptide comprising an amino acid sequence of SEQ ID NO:2; wherein the polypeptide is encoded by a nucleic acid molecule that hybridizes to a nucleic acid molecule of SEQ ID NO:1 under stringent conditions.
12. The polypeptide of claim 11, wherein the polypeptide, or fragment thereof, has an activity selected from the group consisting of:
- a) a fibroblast growth factor-like activity;
 - b) a cell proliferative activity;
 - c) a glia activating activity; and
 - d) a neuroprotective-like activity.
13. An antibody that selectively binds to the polypeptide of claim 11, and fragments, homologs, analogs, and derivatives of said antibody.

14. A method of producing the polypeptide of claim 11, said method comprising the step of culturing the host cell of claim 10 under conditions in which the nucleic acid molecule is expressed.

15. A method of detecting the presence of the polypeptide of claim 11 in a sample, comprising contacting the sample with a compound that selectively binds to the polypeptide of claim 11 and determining whether the compound bound to the polypeptide of claim 11 is present in the sample.

16. A method of detecting the presence of a nucleic acid molecule of claim 1 in a sample, the method comprising contacting the sample with a nucleic acid probe or primer that selectively binds to the nucleic acid molecule and determining whether the nucleic acid probe or primer bound to the nucleic acid molecule of claim 1 is present in the sample.

17. A method for modulating the activity of the polypeptide of claim 11, the method comprising contacting a cell sample comprising the polypeptide of claim 11 with a compound that binds to said polypeptide in an amount sufficient to modulate the activity of the polypeptide.

18. A method of treating or preventing a disorder, said disorder selected from a proliferative disorder, a differentiative disorder, and a glia-associated disorder, said method comprising administering to a subject in which such treatment or prevention is desired an amount of a therapeutic selected from the group consisting of:

- a) the nucleic acid of claim 1;
- b) the polypeptide of claim 11; and
- c) the antibody of claim 13;

wherein said therapeutic is administered in an amount sufficient to treat or prevent any one of a proliferative disorder, a differentiative disorder, and a glia-associated disorder in said subject.

19. A pharmaceutical composition comprising a therapeutically or prophylactically effective amount of a therapeutic selected from the group consisting of:

- a) the nucleic acid of claim 1;

- b) the polypeptide of claim 11; and
- c) the antibody of claim 13;

and a pharmaceutically acceptable carrier.

20. A kit comprising in one or more containers, a therapeutically or prophylactically effective amount of the pharmaceutical composition of claim 19.

21. The use of a therapeutic in the manufacture of a medicament for treating a syndrome associated with a human disease, the disease selected from a proliferative disorder, a differentiative disorder, and a glia-associated disorder, wherein said therapeutic is selected from the group consisting of:

- a) the nucleic acid of claim 1;
- b) the polypeptide of claim 11; and
- c) the antibody of claim 13.

22. A method for screening for a modulator of activity or of latency or predisposition to any one of a proliferative disorder, a differentiative disorder, and a glia-associated disorder, said method comprising:

- a) administering a test compound to a test animal at increased risk for any one of a proliferative disorder, a differentiative disorder, and a glia-associated disorder, wherein said test animal recombinantly expresses a FGF-CX protein;
- b) measuring expression the activity of said protein in said test animal;
- c) measuring the activity of said protein in a control animal that recombinantly expresses said protein and is not at increased risk for any one of a proliferative disorder, a differentiative disorder, and a glia-associated disorder; and
- d) comparing expression of said protein in said test animal and said control animal, wherein a change in the activity of said protein in said test animal relative to said control animal indicates the test compound is a modulator of latency of any one of a proliferative disorder, a differentiative disorder, and a glia-associated disorder.

23. The method of claim 22, wherein said test animal is a recombinant test animal that expresses a test protein transgene or expresses said transgene under the control of a promoter at an increased level relative to a wild-type test animal, and wherein said promoter is not the native gene promoter of said transgene.

24. A method for determining the presence of or predisposition to a disease associated with altered levels of a FGF-CX polypeptide of claim 11, the method comprising:

- a) measuring the amount of the polypeptide in a sample from the mammalian subject; and
- b) comparing the amount of said polypeptide in step (a) to the amount of the polypeptide present in a control sample,

wherein an alteration in the level of the polypeptide in step (a) as compared to the control sample indicates a disease condition.

25. A method for determining the presence of or predisposition to a disease associated with altered levels of a FGF-CX nucleic acid of claim 1, the method comprising:

- a) measuring the amount of the nucleic acid in a sample from the mammalian subject; and
- b) comparing the amount of said nucleic acid in step (a) to the amount of the nucleic acid present in a control sample,

wherein an alteration in the level of the nucleic acid in step (a) as compared to the control sample indicates a disease condition.

26. A method of treating a pathological state in a mammal, the method comprising administering to the subject a polypeptide to a subject in an amount to alleviate the pathological condition, wherein the polypeptide a polypeptide having an amino acid sequence at least 85% identical to a polypeptide with an amino acid sequence of SEQ ID NO:2, or a biologically active fragment thereof.

27. A method of treating a pathological state in a mammal, the method comprising administering to the subject the antibody of claim 13 in an amount sufficient to alleviate the pathological condition.